

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A microarray comprising a plurality of single stranded nucleic acid probes immobilized in discrete areas of a solid support, said probes being hybridised to a library of complexes, wherein each complex comprises an encoded molecule and a template which codes for said molecule, said template comprising a number of codons which codes for chemical entities which upon reaction form a reaction product which at least partly form part of the encoded molecule.

2. (Original) A microarray according to claim 1, wherein the chemical entities are precursors for a structural unit appearing in the encoded molecule.

3. (Currently Amended) A microarray according to claim 1 or 2, wherein the chemical entities are transferred to the nascent encoded molecule by a building block, which further comprises an anti-codon.

4. (Original) A microarray according to claim 3, wherein the information of the anti-codon is transferred in conjunction with the chemical entity to the nascent complex.

5. (Currently Amended) A microarray according to
~~any of the claims 1 to 4~~ claim 1, wherein the chemical entities are reacted without enzymatic interaction.

6. (Currently Amended) A microarray according to
~~any of the claims 1 to 5~~ claim 1, wherein the template comprises two or more codons.

7. (Currently Amended) A microarray according to
~~any of the claims 1 to 6~~ claim 1, wherein the nucleic acid probe of the array is hybridised to a template through an adapter oligonucleotide having a sequence complementing the probe as well as the template.

8. (Original) A method for preparing a microarray displaying a library of encoded molecules, wherein an oligonucleotide microarray comprising a plurality of single stranded nucleic acid probes immobilized in discrete areas of a solid support is mixed under conditions which allows for

specific hybridisation with a library of complexes, each of said complexes comprising an encoded molecule and a template which codes for said molecule, said template comprising a number of codons which codes for chemical entities which upon reaction form a reaction product which at least partly form part of the encoded molecule.

9. (Original) A method for identifying an encoded molecule having a preselected property, comprising the steps of

- i) providing the microarray according to claim 1
- ii) adding a biological sample containing target molecules,
- iii) washing non-bound material off, and
- iv) detecting any bound material in each spot.

10. (Cancelled)

11. (New) A microarray according to claim 2, wherein the chemical entities are transferred to the nascent encoded molecule by a building block, which further comprises an anti-codon.

12. (New) A microarray according to claim 11,
wherein the information of the anti-codon is transferred in
conjunction with the chemical entity to the nascent complex.

13. (New) A microarray according to claim 2,
wherein the chemical entities are reacted without enzymatic
interaction.

14. (New) A microarray according to claim 2,
wherein the template comprises two or more codons.

15. (Currently Amended) A microarray according to
claim 2, wherein the nucleic acid probe of the array is
hybridised to a template through an adapter oligonucleotide
having a sequence complementing the probe as well as the
template.

16. (New) A microarray according to claim 11,
wherein the chemical entities are reacted without enzymatic
interaction.

17. (New) A microarray according to claim 11,
wherein the template comprises two or more codons.

18. (New) A microarray according to claim 11, wherein the nucleic acid probe of the array is hybridised to a template through an adapter oligonucleotide having a sequence complementing the probe as well as the template.

19. (New) A microarray according to claim 3, wherein the chemical entities are reacted without enzymatic interaction.

20. (New) A microarray according to claim 3, wherein the template comprises two or more codons.

21. (New) A microarray according to claim 3, wherein the nucleic acid probe of the array is hybridised to a template through an adapter oligonucleotide having a sequence complementing the probe as well as the template.